

PRELIMINARY REPORT OF NEW HOPE MINE
(SWETMANN PROPERTY), PALMER CREEK,
HOPE MINING DISTRICT, ALASKA,
September 3, 1937.

Location and Accessibility:

The New Hope Mine is located on the right limit of Palmer Creek, one mile below the Hirshey Mine. The outcrops and workings are located between elevations of 2800 and 2900 feet, approximately a thousand feet above the road and two thousand feet back. This is approximately 11 miles via gravel road from Hope.

History and Development:

The discovery was made by Robert Hatcher in July, 1936, who was prospecting in this region. Two claims were staked and the ownership of the claims was transferred to Mr. & Mrs. E. Swetmann of Seward, Alaska, who are engaged in the present development.

A tunnel 76 feet below the vein outcrop was started in July of last year, and a total of 50 feet was driven by hand methods. This season a portable compressor was installed and the tunnel had a combined length of 290 feet, including two short crosscuts. Five opencuts were made on the main vein and one long opencut was made on the branch vein. This season a caterpillar road was built from the Palmer Creek road to the tunnel site.

Geology and Showings:

The formation that incloses the two small veins is a folded and schisted blue to black slate. The strike is nearly north and south and the dip is 50 to 60° to the east. The main vein cuts the schistosity at a low angle while the branch vein cuts at approximately 60°. The main vein has a strike of N. 17° E. and dips 67° W., cutting the schistosity in dip. This vein can be traced over a distance of 100 feet in the cuts, and several feet further by tracing float up the ridge. The vein averages less than one foot with 4 to 6 inches of quartz.

The branch vein has a strike of N. 50° W. and a flat dip of 33° to the north. It is exposed a distance of 40 feet in the opencut. The extension of the strike intersects the main vein, but this intersection is not exposed. This intersection of the two veins has no doubt a decided rake to the northeast, and the main vein does not continue evidently much past this intersection, as it was not encountered

in the tunnel below. The vein has no doubt pinched to a narrow tight seam and was not recognized in the tunnel. The tunnel passes directly under the vein and extends into the footwall. A small 2-inch vein was cut at a point 265 feet from the portal. This vein dips 70° to the east and does not conform in size, dip or strike of the surface veins. Small slip faults were noted in the slate formation in the tunnel.

Not sufficient development has been done to determine the structure on which these veins occur. They are possibly small shears which are associated with the major folding of the graywacke and slate formation.

Mineralization:

Considerable gold is found in the quartz contained in this vein. Also it was found along the walls and in vugs and around clusters of quartz crystals. While the surface mineralization is oxidized, the unaltered ore shows arsenopyrite, pyrite, galena and gold.

The gangue minerals are a hard brittle milky white quartz and crushed pieces of slate. The walls are free and distinct, while a notable feature is the heavy sulphide mineralization that adheres to them.

Production:

No samples were taken, as gold shows in the quartz of all the cuts. A shipment of six tons of ore, shipped in the fall of 1936, gave a return of \$80 per ton in gold.

Machinery, etc.:

A two-cylinder Sullivan Portable compressor is run by a Budda gasoline engine. This is installed in a combined blacksmith shop at the portal of the tunnel. Jackhammers mounted on a bar are used in drilling.

A sheet metal bunk house is located 1,000 feet off the road. Supplies are delivered by caterpillar on contract.

Timber is available on lower Palmer Creek, and a small stream 400 feet south would furnish enough water for milling.